

## ABSTRACT

### METHOD AND APPARATUS FOR SEGMENTING IMAGES

5       The method discloses a method of segmenting an image. The method firstly (304) allocates pixels as seeds in areas of an image as a function of the luminance of the pixels and the size of those areas. The method then grows (306) regions from said seeds so as to segment the image into a number of regions. The method considers a number of pixels that border the growing regions and the pixel that is most similar in luminance to a region  
10 it borders is appended (528) to that region. The method then updates (528) the luminance of the appended region. The method continues until there are no more pixels bordering the growing regions. The method then encodes the segmented image (106). It does this by splitting (604) the image into a number of rectangular sub-images in a quadtree manner until each rectangular sub-image comprises a segmented image forming the  
15 dominant portion of the sub-image. The method then merges (606) rectangular sub-images which have a common dominant portion and share a common edge.

Figs. 3, 5A, and 6.